



## Netball

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### About Netball

Netball games are played in four 10-15 minute quarters with seven players on the court at any one time. Because of the stop-and-go style of play, both the aerobic and anaerobic energy systems are used during a game or training. This means that both recreational and elite players require endurance, strength, speed, agility and ball-handling skills. Training sessions may range from one session per week to one to two sessions per day. These may cover individual ball skills and goal shooting practice, team strategies, weights, running and high intensity sprints.

Elite netball players tend to be active all year round, and competition can be made up of multiple games per week or weekend 'away' tours. At a recreational level, games are usually played in the evenings during the week or on weekends.

### Training diet

It is important to eat a diet that has adequate amounts of carbohydrate - this will ensure that muscle glycogen (stored energy) levels are topped up, thus fuelling those fast sprints! As with all sports, a balanced diet that is low in fat and high in vitamins and minerals (from plenty of fresh fruit and vegetables) will help to keep up energy levels for optimal performance.

### Fluid Needs

In order to stay hydrated, fluids should be consumed before, during and after training and matches. However, body fluid losses will vary depending on training and competition times and venues.

If playing on an indoor air-conditioned court, players may find that they don't sweat as much as if they are playing on a poorly ventilated court, or outdoors in the summer heat. Hot playing conditions will result in noticeably high body fluid losses; however, players should also be aware that they can still lose significant amounts of body fluids when playing in air-conditioned venues. The trouble is that, due to the cool environment, players are unlikely to feel the need to replace these losses.

So, rather than relying on sweat rate or thirst, a more reliable method of assessing your body fluid losses is a weigh-in before and after the game or training session. For every one kilogram of body weight lost, players should drink 1.5L of fluid - this can be either in the form of water or sports drink.

Keep an eye on urine volume and colour – producing a small volume of dark-coloured urine is a sign of dehydration. As a general guide, at least 2-3L per day should be consumed.

### Before training or competition

The aim is to start any exercise session or competition well hydrated. This requires drinking regularly throughout the day leading up to training or competition. Encourage a drink with all meals and snacks. Immediately before the training or competition begins, players should aim to consume 200-300 ml of fluid. This not only helps with hydration, but also prepares the stomach for accepting fluids throughout the game.

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A low-fat, carbohydrate based meal 2 to 4 hours before start of game is ideal e.g. pasta/rice/noodles plus plenty of fluid. This could be followed by a snack such as a muesli bar/sandwich/fruit in the hour or so before the start of the game if needed.

#### Examples of pre event meals:

- Breakfast cereal with low fat milk
- Canned spaghetti on toast
- Pasta with tomato-based sauce
- Toasted ham and tomato sandwich
- Liquid nutrition supplement, such as Sustagen® Sport

## What should I eat during competition?

While carbohydrate is an important consideration during a game, the focus needs to be on fluids for hydration. Indoor environments, coupled with high-intensity exercise can lead to large sweat losses, especially in larger/taller players. Frequent breaks in game play however, such as injury stoppages, quarter and half time breaks, provide the perfect opportunity to take in fluids. And while water is a must during training and for hydration during the day, sports drinks during a game may promote better performance. How? Because sports drinks not only deliver fluid, but they also deliver some carbohydrates to the brain and working muscles.

Sports drinks can also be more palatable than plain water, and larger volumes tend to be taken in than when drinking plain water alone. They also deliver some salts which can increase thirst (thus encouraging fluid intake) and help to replenish salts lost through sweat.

Remember that netball is not only a game of high-intensity sprints, but also requires concentration, fast decision-making and ball-handling skills. These skills (especially the latter three) are affected by dehydration and low blood glucose (energy) levels. Sports drinks are ideal in this sport as a means of topping up energy levels during the game and/or training, as well as encouraging players to drink more.

## What about Recovery?

There are three golden rules in recovery nutrition:

- **Refuel** muscle glycogen (carbohydrate stores)
- **Repair** muscle tissue (for maintenance & development)
- **Rehydrate** - replace fluids and salts lost through sweat

This means that recovery meals and snacks must contain carbohydrate (fuel), some protein (for muscle repair and/or gains) and plenty of fluids to replace sweat losses.

The first step is to have a recovery snack (containing all of the above) **within 30 minutes** of finishing a game or training session.

#### Some recovery snack suggestions include:

- A vegemite & cheese sandwich + fluids
- Fruit salad + yoghurt + fluids
- A salad roll/wrap + fluids
- Sustagen Sport®
- Banana/fruit smoothie
- Soup-in-a-cup + bread roll + slice cheese

**Be prepared** - players should have these snacks ready to go so they don't rely on the venue to provide a suitable snack (because pies and lollies are not!).

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This snack should be followed up by a more substantial meal **within 3 to 4 hours** after finishing exercise. Again, it needs to contain carbohydrates and protein.

### Some suggestions for a recovery meal include:

- Baked beans/spaghetti on toast
- Pasta with a low-fat bolognese sauce
- Rice with a low-fat tomato-based chicken curry
- Thai noodle salad with lean beef + fluids
- Grilled chicken breast with potato + veggies
- Jacket potato with low-fat fillings

Rehydration is vital after exercise and it is important to monitor fluid losses after a game or training session. A weight before and after exercise provides a measure of fluid lost. Assuming that 1kg of body weight lost is equivalent to 1L of fluid, for every one litre of fluid lost during play, it needs to be replaced by 1.5L in recovery.

**Example:** Pre-game weight (**70kg**) - post-game weight (**68kg**) = 2kg BW lost = **2L fluid lost**

So, **2L fluid lost** x **1.5L** = 3L fluid to be taken in over a few hours after exercise, or if a game finishes late at night, some fluid after the game and in the morning after. This will help to prevent multiple pee stops at night and allow a restful night's sleep (also important in recovery!).



## Other Nutrition Tips

**Alcohol:** If players are going to drink, do so in moderation. Excess consumption can impair recovery and rehydration and can indirectly (or directly) impact on individual performance. Make sure that recovery and rehydration goals are met before consuming alcohol.

**Be organised!** Young players living together with a common lack in domestic and cooking skills can be a problem! So planning meals ahead, a roster-system if rooming in with mates and some ready-to-go meals and snacks for the late nights can help to meet nutrition goals. If cooking is means fried eggs on toast every night, a sports dietitian can help out with shopping and cooking classes.

**Iron levels:** Some players may have problems with low iron levels, especially females with low iron intakes. Iron levels should be checked regularly during heavy training or if fatigue levels are unusual. See our fact sheet on [Iron Deficiency in Athletes](#) and speak to a Sports Dietitian on how to increase iron in your diet.

**Junior athletes:** Younger athletes have other nutritional requirements. As it is beyond the scope of this fact sheet, please see [Fuelling and Cooling the Junior Athlete](#) for more information.

## How to get involved

As Netball is such a popular sport, there are competitions for people of all ages and standards. For more information, go to Netball Australia at <http://www.netball.asn.au/>

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